

ART. VIII.—*Contributions to the Flora of Australia*, No. 30.
*Records of and additions to the Flora of Central Australia.**

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During a recent visit to Central Australia to investigate serious cases of cattle poisoning by poison plants on the N. Australian stock route between Wycliffe and Taylor, the senior author took advantage of the opportunity to collect largely in the district traversed. The present paper represents the first working up of some of the material collected, and consists mainly of new records or of additions to the flora of the Northern Territory. The new species will appear in a later paper, with lists of the remainder of the plants collected. With this material, aided by a full working out of the material of the Tate Herbarium in Adelaide, and of Mr. Allan's Herbarium from Darwin, which he has kindly placed at the senior author's disposal, it is hoped ultimately to bring out a second and more complete Flora of the Northern Territory.

CYCADACEAE.

Macrozamia Macdonnellii F.v.M.

Heavitree Gap, Simpson's Gap, and Arltunga, July, 1924,
Palm Valley, Krichauff Ranges in great abundance, and
also sporadically on the southern or eastern sides of gaps
and valleys throughout the Macdonnell Ranges.

CONIFERAE.

Callitris robusta R.Br.

Rocks 13 miles N. of Connor's Well, July, 1924, 12-30 ft.

GRAMINEAE.

Anthistiria imberbis Retz.

Oodnadatta to Alice Springs.

Eriachne melicacea F.v.M.

Wycliffe Well, N.T., June, 1924.

E. obtusa R.Br.

Wycliffe Well, N.T., June, 1924.

Pappophorum nigricans R.Br.

Wycliffe Well, N.T., June, 1924.

*No. 29 in Proc. Roy. Soc. Victoria, n.s., xxxiii., p. 226, 1921.

Eragrostis Dielsii (Pilger) (*E. falcata* Benth. non Gaud.).

Bed of Taylor River, N.T., June, 1924. This was recorded near Hugh R., Macdonnell Range, G. F. Hill, No. 139, 4/5/1911. Stunted specimens under *E. falcata* Gaud., following Bentham.

E. diandra (Steud.).

Stirling Station, July, 1924. Eaten freely by stock.

E. tenella Beauv.

Thring Swamp, Wycliffe, N.T., June, 1924.

CYPERACEAE.

Lipocarpha microcephala Kunth.

Thring Swamp, Wycliffe, N.T., June, 1924.

Cyperus squarrosus L.

Thring Swamp, Wycliffe, N.T., June, 1924.

C. rotundus L.

Thring Swamp, Wycliffe, N.T., June, 1924. Known to the natives as "Yelca."

CASUARINEAE.

Casuarina Decaisneana F.v.M. The Desert Sheoak.

This forms to the south of the Hugh River a belt of open timber 10 to 30 miles in width N. and S. and some 200 miles E. and W. The trees average 30 feet in height, and 1 to 2 feet in diameter. This remarkable forest is near the transition from the 6" to the 12" rain belt.

Ficus glabella Bl. (*F. nesophila* F.v.M.).

Barrow Creek Range, 10-12 ft., July, 1924.

F. platypoda A. Cunn.

Simpson's Gap, Macdonnell Range, July, 1924.

PROTEACEAE.

Grevillea agrifolia A. Cunn.

Taylor Range, Central Mt. Stuart, July, 1924.

G. juncifolia Hook.

3-8 m. N. of Taylor Creek, July, 1924.

G. refracta, R.Br.

Taylor Range, July, 1924.

G. stenobotrya F.v.M.

E. Taylor Range, July, 1924.

Hakea intermedia Ewart and Davies.

Alice Springs, 8-12 ft. Woodford wells and bank of river,
9 m. S. of Woodford River, June, 1924.

H. lorea R.Br.

Bank of Woodford River, June, 1924.

var. *suberea*, Sp. Le Moore.

Alice Springs, 1924. With prominent rough ridges of corky bark. Known to the natives as "Wungeah."

LORANTHACEAE:

Loranthus bifurcatus Benth.

12 m. N. of Ryan's well on Eucalyptus.

L. Exocarpi Behr.

Near Hermannsburg, on *Acacia Farnesiana*, July, 1924.

var. *spathulata*.

Wycliffe well, N.T., banks of Taylor River, on Acacia, June, 1924.

L. gibberulus Tate.

Burt's Well and Alice Springs, on Grevillea and Hakea.

L. pendulus Sieb. (*L. Miquelii* (Lehm.).)

Between Barrow and Taylor Creeks, on Eucalyptus and Acacia, June, 1924.

L. Quandang Lindl.

Between Barrow and Taylor Creeks. Common on mulga, June, 1924. Alice Springs, on Acacia.

SANTALACEAE.

Santalum lanceolatum R.Br.

12 m. N. of Ryan's well, Central Mt. Stuart, July, 1924.

CHENOPodiACEAE.

Rhagodia crassifolia R.Br.

3 m. N. of Mt. Taylor, N.T., June, 1924.

2 m. from Hermannsburg, July, 1924, straggling.

R. nutans R.Br.

2 m. N. of Taylor, N.T., 5-7 ft., June, 1924, straggling.

R. spinescens R.Br.

Near foot of Central Mt. Stuart, 6-8 ft., July, 1924, straggling.

Chenopodium rhadinostachyum F.v.M.

Bed of Taylor River, June, 1924.

C. simularis, F.v.M. and Tate.

Bed of Taylor River, June, 1924.

AMARANTACEAE.

Ptilotus obovatus F.v.M.

Alice Springs, July, 1924.

var. *grandiflorum*.

Burt Plain, June, 1924.

Alternanthera nana, R.Br.

Near Central Mt. Stuart, July, 1924.

PHYTOLACCACEAE.

Gyrostemon cotinifolius Desf.

Horseshoe bend to Wycliffe, June, 1924. Known as Widgeri to the blacks, who eat the sappy roots.

G. ramulosus Desf.

Horseshoe bend to Wycliffe, July, 1924.
Didymotheca cupressiformis Walt.

Wycliffe and Taylor Well, July, 1924. A.J.E.

The Wycliffe specimen tallies with the type of the species in the Melbourne Herbarium. If, as well as the type, may have 1 or 2 carpels to the female flower, as in *D. Tepperi* F.v.M. Diels in Engler's Pflanzenreich wrongly gives *D. cupressiformis* as having 2 carpels only. *D. Tepperi* has a longer and flatter leaf, and a more irregular branching instead of the upright cypressus-like habit of *D. cupressiformis*. The latter was not previously recorded from any definite locality in the Northern Territory.

PORTULACACEAE.

Calandrinia ptychospermae F.v.M.

Wycliffe, June, 1924. Plant remained succulent, and continued to open flowers in Herbarium press for 6 weeks. One of the components of "parachelia" herbage on which stock can graze for months without water.

CARYOPHYLLACEAE.

Polycarphaea triloba Ewart and Cookson.

Near Central Mt. Stuart, July, 1924.

CRUCIFERAE.

Cochlospermum Fraseri Planchon.

Abundant on Macadam Ranges, near Victoria and Fitz-maurice Rivers, Dr. Basedow, 1922.

DROSERACEAE.

Drosera indica L.

Near Wycliffe Well and Thring Swamp, June, 1924.

LEGUMINOSAE.

Papilionaceae.

Brachysema Chambersii F.v.M.

Between Wycliffe and Taylor, and 5-8 m. N. of Taylor Creek, June, 1924.

Isotropis atropurpurea F.v.M.

5-8 m. N. of Taylor Creek. Said to be poisonous to stock, and when tested gave positive results.

Mirbelia aphylla F.v.M.

Near Barrow Creek, N.T., July, 1924. Bagot's Creek, George and Gill's Range, Central Australia, 1894, R. Tate.

M. oxyclada F.v.M.

5-8 m. N. of Taylor Well, N.T., and Taylor Range July, 1924. Near Finke River, Rev. H. Kempe, 1882.

Burtonia polyzyga Benth.

E. Taylor Range, rocky rises, July, 1924.

Gastrolobium grandiflorum F.v.M.

12 m. N. of Wycliffe, N.T., June, 1924. July, 1924.

G. grandiflorum, var. *luteum* L. R. Kerr, new var.

Bonny Well, N.T., 30 m. N. of Wycliffe Well, June, 1924. Not common. F. A. C. Bishop.

It is a shrub 6-8 ft. high, and has rather longer and narrower leave than the type of *G. grandiflorum*. The flowers are yellow instead of brownish red, and the stalk of the ovary is hairy, especially at the top. Bentham gives the stalk of *G. grandiflorum* as glabrous, but it may be more or less hairy in the type form. Calyx and corolla as in type.

Crotalaria linifolia Linn.

Wycliffe, flowers yellow, June, 1924.

C. dissitiflora Benth.

Between Wycliffe and Taylor, 3-4 ft., June, 1924.
var. *eremaea*.

Flower yellow. Standard not prominently veined.

C. Mitchelli Benth.

Taylor Creek, June, 1924.

C. Novae Hollandiae D.C.

Central Mt. Stuart and Wycliffe, July, 1924.

Lotus australis Andr.

Wycliffe, N.T., June, 1923.

var. *parviflora* Benth. (*L.coccineus* Schlect.)

Wycliffe, N.T., June, 1923.

Indigofera boviperda Morr.

Between Wycliffe and Taylor, June, 1924.

I. enneaphylla L.

Taylor Well, June, 1924.

I. linifolia Retz.

Taylor Flat and Taylor Well, June, 1924.

I. viscosa Lam.

Wycliffe, June, 1924.

Swainsona microphylla A. Gray.

5-8 m. N. of Taylor Well, N.T., July, 1924. Taylor Range, July, 1924.

S. oroboides F.v.M.

Taylor Flat, N.T., and Taylor Well, June, 1924.

Standard blue and veined, carina yellow.

Aeschynomene indica L.

Central Mt. Stuart, Wycliffe Well, bed of Hansen River, July, 1924.

Glycine tabacina Benth.

2 m. from Teatree Well, July, 1924.

G. falcata Benth.

Alice Springs and Stuart, June, 1924.

Erythrina vespertilio Benth.

5-8 m. N. of Taylor Well, 25-30 ft., "red bean tree,"
July, 1924.

Caesalpiniae.

Petalostylis labicheoides R.Br.

var. *cassiooides*.

Stirling Range, N.T., June, 1924.

var. *microphylla*, Ewart and Morrison.

Between Wycliffe and Taylor, June, 1924.

Cassia concinna Benth.

E. Taylor Range, July, 1924.

C. desolata F.v.M.

Arltunga, August, 1924.

C. eremophila A. Cunn.

Arltunga, August, 1924, and Horseshoe bend to
Wycliffe, June, 1924.

C. notabilis F.v.M.

Wycliffe to Taylor, June, 1924.

Mimosae.

Acacia Hilliana Maiden.

E. Taylor Range, N.T., July, 1924.

A. impressa F.v.M.

Taylor Range, N.T., 3 ft. and 6-10 ft. on rocky rises,
July, 1924.

A. leptophleba F.v.M.

Woodford Well, N.T., July, 1924.

Fruit flat, $1\frac{1}{4}$ " long by $6-7/16$ " broad. Seeds transverse, flattened and oblong, black and shiny, with a small horseshoe shaped depression on each side, near middle. The plant is apparently rare, the Herbarium possessing only the original type specimen, a small sapling with no fruits, from Stuart's Creek. The fruits were previously unknown. In the type specimen the peduncles are nearly $\frac{1}{2}$ " long, but in the Woodford specimens barely $\frac{1}{4}$ ".

A. spondylophylla F.v.M.

Taylor Range and Central Mt. Stuart, July, 1924.

A. stipuligera F.v.M.

E. and W. Taylor Ranges, 6-10 ft. on rocky rises, June,
1924.

ZYGOPHYLLACEAE.

Tribulus hystrix R.Br.

Wycliffe Well, June, 1924. Fruit resembles *T. hystrix*, but flowers almost as small as *T. terrestris*.

EUPHORBIACEAE.

Phyllanthus simplex Retz.

Wycliffe, N.T., June, 1924, 1-1½ ft.

P. rhytidospermus F.v.M.

Taylor Creek, N.T., June, 1924.

Euphorbia myrtoides Boiss.

Seeds greyish and smooth, not rugose, as described in Benthain's *Flora Australiensis*. Wycliffe, N.T., June, 1924.

E. australis Boiss.

Taylor Range, N.T., June, 1924, 6"-1 ft.

E. eremophila A. Cunn.

Taylor Range, N.T., 2-3 ft., June, 1924, and Wycliffe, 3-4 ft.

SAPINDACEAE.

Dodonaea peduncularis Lindl., var. *coriacea* Ewart and Davies.

3-4 ft., between Wycliffe and Taylor, June, 1924.

D. viscosa L., var. *spathulata*.

Simpson's Gap, N.T., July, 1924.

MALVACEAE.

Abutilon Fraseri Hook., var. *parviflora*.

Taylor Well, June, 1924, 3ft.

Malvastrum spicatum A.Gr.

Stirling Station, July, 1924.

Sida cardiophylla L.

Valley, 9 m. S. of Woodford Well, June, 1924.

S. corrugata Lindl., var. *trichopoda*.

Taylor, N.T., June, 1924.

S. cryphioptala F.v.M.

Alice Springs to Stuart, common on rocks, July, 1924.

S. subspicata F.v.M.

Near Barrow Creek, June, 1924.

S. corrugata Lindl., var. *trichopoda*.

Gossypium australe F.v.M.

Near Central Mt. Stuart, June, 1924.

G. Sturtii F.v.M.

Taylor Well and near Barrow Creek, June, 1924.

FRANKENIACEAE.

Frankenia pauciflora D.C.

Neiles Creek, Oodnadatta, S. Australia, May, 1924.

STERCULIACEAE.

Brachychiton Gregorii F.v.M.

Gulf of Carpentaria and Kimberleys, Dr. Basedow, 1922.

The shell of the fruit often carved by the natives.

MYRTACEAE.

Eucalyptus dichromophloia F.v.M.

Mt. Gillen, shrub 5-8 ft., July, 1924. Lower peak of Central Mt. Stuart, July, 1924. These specimens agree with two plants placed under *E. terminalis* in Melbourne Herbarium by F. v. Mueller, such as Finke River, Kempe No. 476, Summit of Mt. Augustus, Forrest, 1883.

E. gamophylla F.v.M.

Rocks 13 m. N. of Connor's Well, N.T., straggling, 5-8 ft., July, 1924.

E. odontocarpa F.v.M.

Central Mt. Stuart, July, 1924.

E. papuana F.v.M.

Heavitree Gap, Macdonnell Range, N.T., July, 1924, on banks of Tod River. "Whitewash gum" of settlers, owing to white mealy surface rubbing off readily when touched.

E. pachyphyllea F.v.M.

Near Barrow Creek and Stirling Range, July, 1924.

E. terminalis F.v.M.

Hills near Stuart, N.T., July, 1924. Tessellated box bark. Tree 30 ft., "Udoriba" of aborigines.

Melaleuca genistifolia Sm.

Finke River, Rev. H. Kempee, No. 431.

var. *coriacea*, new var.

Arltunga, N.T., Aug., 1924, A.J.E. Shrub 6-8 ft. Irregular corky bark, leaves smaller, less than $\frac{1}{4}$ ", and more coriaceous.

M. glomerata F.v.M.

Teatree Well, Mt. Stirling Station, July, 1924.

M. lasiandra F.v.M.

No locality given.

Calytrix microphylla A. Cunn.

Between Taylor and Wycliffe, June, 1924.

UMBELLIFERAE.

Didiscus glaucifolius F.v.M.

Flats in sandhills, Horseshoe Bend, July, 1924, E. M. Osborn.

CONVOLVULACEAE.

Evolvulus alsinoides L.

Wycliffe, N.T., Flowers blue, June, 1924.

var. *sericeus*.

Wycliffe, N.T., Flowers blue, June, 1924.

Ipomaea Davenporti F.v.M.
Wycliffe, N.T., June, 1924.

I. Muelleri Benth.
Wycliffe, N.T. Flowers pink, June, 1924.

BORAGINACEAE.

Halgnania solanacea F.v.M.
2-3 ft. Flowers bluish purple, between Taylor and Wycliffe
Wells, June, 1924.

Heliotropium ovalifolium Forsk.
Flowers white. Banks of Taylor River, N.T., June, 1924.

Trichodesma zeylanicum R.Br.
Wycliffe, N.T., and 10 m. N. of Woodford Wells, June, 1924.

VERBENACEAE.

Dicrastylis Dorani F.v.M.
Horseshoe Bend to Wycliffe, June, 1924.

LABIATAE.

Prostanthera striatiflora F.v.M.
Hermannsburg, N.T., July, 1924.

SOLANACEAE.

Duboisia Hopwoodi F.v.M.
H. Huddlestone, Stirling Station, N.T., July, 1924.

Nicotiana suaveolens Lehm.
Taylor Flat, N.T., June, 1924. Eaten down freely by stock.
Only few plants as yet. Common along the stock route
above Old Crown and New Crown stations, and when
abundant capable of poisoning travelling stock tempted
by its green succulence.

SCROPHULARIACEAE.

Morgania floribunda Benth.
Stirling Station, July, 1924; also from Charlotte Waters, C.
Giles, 1875; Finke River, Dittrich, Lindsay's Expedi-
tion, 1885-6.

Stemodia viscosa Roxb.
Stirling Station, July, 1924. Palm Valley, 12 m. from
Hermannsburg, July, 1924.

BIGNONIACEAE.

Tecoma australis R.Br.
Simpson's Gap, July, 1924, Mrs. Dutton.

MYOPORACEAE.

Eremophila Freelingii F.v.M.

Previously recorded from N. Australia. Simpson's Gap, N.T., July, 1924. Near Dalton and Arltunga, August, 1924. Emily Gap, Macdonnell Range, July, 1924.

E. Latrobei F.v.M.

Horseshoe Bend, Finke River, and Wycliffe, June, 1924.

E. Macdonnellii, F.v.M.

Taylor Well, Teatree Well, July, 1924.

var. *macrocarpa*.

Taylor Flat.

E. maculata F.v.M.

Taylor, N.T., June, 1924.

Myoporuni Dampieri A. Cunn.

Near Hermannsburg, N.T., June, 1924.

CAMPANULACEAE.

Wahlenbergia gracilis A.D.C.

Wycliffe Well, June, 1924; bed of Taylor River.

Goodenia gracilis R.Br., var. *lamprosperma*.

Wycliffe Well, N.T., June, 1924.

The vegetative characters on which *G. lamprosperma* was distinguished as a separate species by Baron von Mueller are only varietal in character. The specimen of *G. gracilis* recorded in the N.T. flora from 80 m. W. of Powell's Creek, G. F. Hill, 6/7/11, is the variety *lamprosperma*.

G. hederacea Sm.

Between Wycliffe and Taylor Range, Teatree Well, July, 1924.

G. heterochila F.v.M.

Wycliffe Well, June, 1924. Small leaved form.

G. mollissima, F.v.M.

Wycliffe, N.T., June, 1924. Scapes one or more flowered, crenulations of leaves smaller and leaves longer, otherwise like *G. mollissima*.

Goodenia Ramellii F.v.M.

Taylor River, E. and W., June, 1924. 2-3 ft., with rosette leaves.

G. Vilmorineae F.v.M.

Near Barrow Creek, Purple flowers, June, 1924. Taylor River, June and July, 1924.

Scaevola ovalifolia R.Br.

4 m. N. of Taylor River, N.T., 18", blue flowers, June, 1924.

BRUNONIACEAE.

Brunonia australis Sm.

Between Wycliffe and Taylor, June, 1924.

COMPOSITAE.

Calotis porphyroglossa F.v.M.

Wycliffe Well, N.T., June, 1924. Recorded for N. Aust.,
but not previously from a definite locality in N.T.

Pluchea Eyrea F.v.M.

Wycliffe Well, N.T., June, 1924.

Pterigeron microglossus Benth.

Taylor, June, 1924, and Wycliffe Well, June, 1924. Bentham
gives plant as glabrous, or slightly glandular, pubescent,
and not over 8". Our specimens are over 1 ft. high,
and are covered with curled, almost woolly, hairs, but in
other respects agree with type.

P. macrocephalus F.v.M.

Near foot of Central Mt. Stuart, July, 1924.

P. odorus Benth.

Wycliffe, N.T., and Taylor, June, 1924.

Epaltes australis Less.

Stirling Station and Wycliffe, June, 1924.

Pterocaulon glandulosus F.v.M.

Stirling Range, July, 1924.

P. sphacelatum Benth. and Hook.

Woodford Wells, and Teatree Well, bed of creek, July,
1924.

Helichrysum apiculatum D.Don.

Wycliffe, July, 1924.

Rutidosis helichrysoides D.C.

Finke River, Rev. H. Kempe, 1879. Thring Swamp,
Wycliffe, June, 1924.

Centipeda orbicularis Lour.

Stirling Station, and Wycliffe, June, 1924.

Gnaphalium indicum L.

Wycliffe Well, N.T., June, 1924. Not previously recorded
from any definite locality.

Myriocephalus Rudallii F.v.M.

C. Aust., C. Winnecke, 1883. Wycliffe Well, N.T., June,
1924. Not previously recorded.

Senecio magnificus F.v.M.

Scattered from Connor's Well to Bourke Well, July, 1924.

Also Hansen's Well, July, 1924. 3-4 ft. Not previously
recorded, but there is a specimen in the Melbourne Her-
barium from Rev. H. Kempe, Finke River, 1877-80.